

Claims

1. Method for the provision of a defined quality of service in a packet switched communication system with interconnected nodes (N) for the forwarding of data packets, wherein the system comprises at least one edge node (EN) for the connection to user equipment (UE) or a further communication system (FS) and for processing data packets which comprise a data field (10) specifying the handling of the packets and the nodes (N) perform a differentiated handling of packets according to said data field (10), characterized in that the communication system comprises or is connectable to a data base (DB) which contains a record for a user specifying a quality of service for said user, an edge node (EN) which processes a packet for said user is provided with quality parameters from the data base (DB) and the edge node (EN) sets the data field (10) specifying the handling of the packet according to the record.
2. Method according to claim 1, wherein the data field (10) is specified according to a requested quality of service.
3. Method according to claim 2, wherein the data packets are processed according to a protocol stack and an edge node (EN) sets the data field (10) according to information specified on a layer (LA, LI) in the protocol stack of the edge node (EN) which is different from the layer (LR) evaluated by the nodes for the handling of the packets.
4. Method according to any preceding claim, wherein the data field (10) is specified according to a traffic load in the communication system (CS).

5. Method according to any preceding claim, wherein quality parameters are forwarded from a second node (EN') to the edge node (EN) which processes data packets for said user.
- 5 6. Method according to any preceding claim, wherein the data packets are internet protocol packets and the data field (10) is the differentiated services field in the internet protocol header.
7. Method according to claim 6, wherein unspecified bits (UD) in the differentiated services field are set according to the record and the packet handling is performed according to the bits (UD) set.
- 10 8. Method according to claim 6 or 7, wherein the bits (CP) specifying the per hop behavior are set according to the record.
- 15 9. Method according to any preceding claim, wherein said data base (DB) is a location register.
10. Method according to any preceding claim, wherein a node (N) evaluates the data field (10) if the traffic load is above a threshold value.
- 20 11. Edge node in a packet switched communication system with interconnected nodes (N) for the forwarding of data packets, wherein the edge node (EN) processes the data packets and is connectable to a node (N) and to user equipment (UE) or a further communication system (FS) and the packets comprise a data field (10) for specifying the handling of the packets in the nodes (N), characterized in that the edge node (EN) is provided with an interface to access a data base (DB) holding user records,
- 25 30 the edge node (EN) is provided with means to store parameters specifying a

quality of service for the user served from the record for said user and the edge node (EN) is provided with processing means which set the data field (10) specifying the handling of the packet according to the record.

- 5 12. Edge node according to claim 11, wherein the node is provided with means to process data packets according to a protocol stack and the processing means set the data field (10) on the layer (LR) evaluated by the nodes (N) for the handling of the packets according to data evaluated from a different layer (LA, LI) in the protocol stack.

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13. Edge node according to claim 11 or 12, wherein an edge node is a serving GPRS support node (SGSN) or a gateway GPRS support node (GGSN).

14. Edge node according to claim 13, wherein the edge node comprises a control node and a node for processing packets.

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15. Edge node according to claim 11 or 12, wherein an edge node is a radio network controller (CR) or a adapter in a user equipment (UE).

- 20 16. Node for a packet switched communication system with interconnected nodes (N) for the forwarding of data packets which comprise a data field (10) specifying the handling of the packets, wherein the nodes (N) comprise processing means for performing a differentiated handling of the packets according to said data field (10), the data packets are internet protocol packets
- 25 and the data field (10) is the differentiated services field in the internet protocol header, characterized in that the node evaluates the unspecified bits (UD) in the differentiated services field and performs the packet handling according to the unspecified bits (UD).

17. Node according to claim 16, wherein the node (N) is provided with means to measure the traffic load and the data field (10) is evaluated if the traffic load is above a threshold value.

- 5 18. Program unit on a data carrier or loadable into an edge node in a packet switched communication system, wherein the edge node (EN) provides connections and processes packets sent between user equipment (UE) or a further communication system (FS) and nodes (N) in the communication system which perform a differentiated handling of the packets according to a
- 10 data field (10) in the data packets, characterized in that the program unit comprises means for loading parameters for a user served by the edge node, said parameters specifying a quality of service for said user, and the program unit comprises means for setting the data field (10) according to the parameters.
- 15 19. Program unit according to claim 18, wherein the program unit performs at least one step of a method according to any of the claims 1 to 10.